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Stephan Lietz

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EXAMINER

STIGLIC, RYAN M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,510	Applicant(s) LIETZ ET AL.	
	Examiner RYAN M. STIGLIC	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 8-19 are pending and have been examined.
2. Claims 8-14 and 16-19 are rejected.
3. Claims 15 are objected to.

Response to Arguments

4. The objection to the abstract is hereby withdrawn in light the substitute abstract filed February 9, 2009.
5. The duty to disclose in the Non-Final Office Action dated November 11, 2008 is hereby withdrawn in light of applicant's arguments.
6. Applicant's arguments filed February 9, 2009 have been fully considered but they are not persuasive. The initial rejection of claim 11 was not saying that a person of ordinary skill in the art would not have used a proposed IEEE standard whilst awaiting a finally approved version (e.g. draft revisions such as 1.04/1.05), but was indicating that the applicant does not have enablement for the subject matter of the finalized IEEE 1394.1 which claim 11 appears to reference. The applicant is advised to amend claim 11 to refer to IEEE 1394.1 draft revision 1.04 such that recitation is consistent with the originally filed specification.
7. The rejection of claims 8-15 under 35 U.S.C. §112, second paragraph, has been withdrawn in light of applicant's amendments.
8. Applicant's arguments filed February 9, 2009 have been fully considered but they are not persuasive. Applicant contends (pages 9-10), "updating the network map when a node is connected or disconnected does not identically disclose (or even suggest) the above quoted

Art Unit: 2111

feature” however the claims do not require the Bizet reference to identically disclose instead they only require the Bizet reference to disclose the broadest reasonable interpretation of the instant claims. Insofar as “detecting a defect...connected to the network bridge” can be reasonably interpreted as a connection/disconnection of a device to the network (and thus network bridge) since the addition/deletion of a device makes the current topology defective.

9. Applicant's arguments filed February 9, 2009 have been fully considered but they are not persuasive. Applicant contends (page 10), “The Bizet reference only concerns one type of data, isochronous, and therefore does disclose “a data volume *for different data types*”, as provided for in the context of the claimed subject matter” (claim 14) however, claim 14 defines the “*different data types*” as “including *at least one of asynchronous and isochronous data*” thus only requiring *one* type of data (e.g. isochronous data).

10. Applicant’s arguments, see page 11, filed February 9, 2009, with respect to the rejection of claim 15 under 35 U.S.C. §103(a) have been fully considered and are persuasive. The rejection of claim 15 has been withdrawn.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which

Art Unit: 2111

it is most nearly connected, to make and/or use the invention. Claim 11 makes reference to data being exchanged between the routing nit and one of the link and transaction layer according to IEEE 1394.1, however as of the filling of the international application November 19, 2004, IEEE 1394.1 had not been approved for standardization. The IEEE 1394.1 standard has not approved until July 1, 2005 and printed under the name IEEE 1394.1-2004. *Please see above.*

13. The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

14. Claim 18 is rejected under 35 U.S.C. 112, fourth paragraph, as failing to specify a further limitation of the claimed subject matter. Claim 18 further limits limitations not required by independent claim 8 in turn failing to further limit independent claim 8.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 8-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication No. 2003/0053466 (hereinafter Bizet).

For claim 8 Bizet discloses:

A network bridge comprising:

Art Unit: 2111

- at least one arrangement for configuration and control of the network bridge (*Fig. 7, 391*; *“The configuration of all modules is done by the central processing unit or SPU 391 through the bus interface 370” [paragraph 0260].*; and
- at least one interface (*Fig. 7, 370*) for providing access to at least some functional blocks of the network bridge (*The CPU 391 is provided access to the functional blocks/modules [e.g. 310-360] through the interface 370 [paragraph 0260].*) for polling and evaluation of at least one of statistical data, performance data, operating data, and parameters , and for manipulation of the at least one of statistical data, performance data, operating data, and parameters, and of the functional blocks, as a function of the evaluation (*FIFO memories are established in a DPRAM 330 [Fig. 7; paragraph 0258] in order to transfer data to/from the IEEE 1394 network. The size of the FIFO memories are dynamically computed and instantiated on an as needed basis [see paragraphs 0310-327]. Therefore, the evaluation of isochronous data enables the network bridge to manipulate the structure of the functional blocks [e.g. FIFOs].*), including detecting a defect in or an attack from a device connected to the network bridge (*Bizet discloses [paragraph 190] that when a defect in the network is detected [e.g. a node is connected/disconnected] the node is deactivated by updating the routing tables.*).

For claim 9 Bizet discloses:

The network bridge according to claim 8, wherein the network bridge is for coupling serial IEEE 1394 buses (*The network bridge connects to IEEE 1394 buses through an IEEE 1394 interface 350 [Fig. 7].*).

Art Unit: 2111

For claim 10 Bizet discloses:

The network bridge according to claim 8, wherein the at least one arrangement includes a software layer within a network bridge architecture (*As previously noted, the configuration of all modules of the network bridge is handled by the CPU 391. Since the CPU is under the control of software instructions, the instructions running on the CPU and controlling the manipulation of functional blocks represent a software layer.*).

For claim 11 Bizet discloses:

The network bridge according to claim 9, wherein, in addition to the functional blocks of the network bridge according to IEEE 1394, routing maps and a routing unit are provided for each connectable bus, information about a topology and node addresses in one of respective connectable buses and networks being provided in the routing maps, and data being exchanged via the routing unit between one of a link and transaction layer according to IEEE 1394.1 and a network bridge temporary memory (*The bridge module 360 [Fig. 7] of the network bridge comprises the routing maps [e.g. routing table; see paragraph 0261] and uses the routing maps to manipulate packets such that they may be transmitted to their appropriate destination [see paragraph 0261 and 0262-0270]. Also, as previously noted FIFO memories temporarily store data that is transferred through the network bridge [see paragraph 0258].*).

For claim 12 Bizet discloses:

Art Unit: 2111

The network bridge according to claim 8, wherein a configuration of resources, including at least one of memory capacity and line capacity, is a function of varying operating parameters (*As previously noted, FIFO memories are established in a DPRAM 330 [Fig. 7; paragraph 0258] in order to transfer data to/from the IEEE 1394 network. The size of the FIFO memories are dynamically computed and instantiated on an as needed basis [see paragraphs 0310-327]. Therefore, the evaluation of isochronous data enables the network bridge to manipulate the structure of the functional blocks [e.g. FIFOs].*).

For claim 13 Bizet discloses:

The network bridge according to claim 12, wherein an allocation of memory regions, including a temporary memory for data to be transported via the network bridge, is a function of a statistical evaluation of a data volume for different data types including at least one of asynchronous and isochronous data (*As noted above, FIFO memories are established in a DPRAM 330 [Fig. 7; paragraph 0258] in order to transfer data to/from the IEEE 1394 network. The size of the FIFO memories are dynamically computed and instantiated on an as needed basis [see paragraphs 0310-327]. Therefore, the evaluation of isochronous data enables the network bridge to manipulate the structure of the functional blocks [e.g. FIFOs].*).

For claim 14 Bizet discloses:

The network bridge according to claim 13, wherein, in the event of at least one of (a) a defect in one of a connected bus and network and (b) an attack by an unauthorized person, at least one of

Art Unit: 2111

(c) a transfer of data is haltable and (d) one of a relevant bus and a connected device is deactivatable (*Bizet discloses [paragraph 190] that when a defect in the network is detected [e.g. a node is connected/disconnected] the node is deactivated by updating the routing tables.*).

For claim 16 Bizet discloses:

The network bridge according to claim 8, wherein responsive to the detecting, the defect or attack is suppressed by removing a source device responsible for the defect or attack via an interface between the arrangement and a PHY configuration register (*Bizet discloses [paragraph 190] that when a defect in the network is detected [e.g. a node is connected/disconnected] the node is deactivated by updating the routing tables (e.g. the PHY configuration register).*).

For claim 17 Bizet discloses:

The network bridge according to claim 8, wherein responsive to the detecting, the defect or attack is suppressed by stopping transmission of data packets between the network bridge and a source device responsible for the defect or attack (*Bizet discloses [paragraph 190] that when a defect in the network is detected [e.g. a node is connected/disconnected] the node is deactivated by updating the routing tables. Therefore, the transmission of data packets from the defective device will eventually be stopped.*).

For claim 18 Bizet discloses:

Art Unit: 2111

The network bridge according to claim 8, wherein the attack includes an unauthorized access to blocked memory regions (*Since claim 18 further limits limitations not required by independent claim 8, the Bizet reference is said to anticipate the instant claim.*).

For claim 19 Bizet discloses:

The network bridge according to claim 12, wherein an allocation of memory regions, including a temporary memory for data to be transported via the network bridge, is a function of a statistical evaluation of a data volume for different data types including at least data (*As noted above, FIFO memories are established in a DPRAM 330 [Fig. 7; paragraph 0258] in order to transfer data to/from the IEEE 1394 network. The size of the FIFO memories are dynamically computed and instantiated on an as needed basis [see paragraphs 0310-327]. Therefore, the evaluation of isochronous data enables the network bridge to manipulate the structure of the functional blocks [e.g. FIFOs]. The DPRAM 330, since it lays out the FIFOs, would include both the isochronous B7 and asynchronous B8 memories of Fig. 2. Thus any memory remaining from the statistical evaluation of isochronous data volume may be instantiated as asynchronous FIFOs.*).

Allowable Subject Matter

17. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN M. STIGLIC whose telephone number is (571)272-3641. The examiner can normally be reached on Monday - Friday (7:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571.272.3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2111

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. M. S./
Examiner, Art Unit 2111

/Paul R. Myers/
Primary Examiner, Art Unit 2111